IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Applicant	:	Mark M. Levy
Appl. No.	:	10/766,861
Filed	:	January 30, 2004
Title	:	INGESTIBLE GASTROINTESTINAL DEVICE
Group Art Unit:		1641
Examiner	:	Ann Y. Lam
Docket No.	:	26180

Honorable Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450

AMENDMENT

Sir:

In response to the Office Action of June 25, 2007, please amend the above-identified application as follows:

In the claims:

1. (currently amended) An ingestible device, comprising:

(a) a sink mechanism for generating an net influx of at least one constituent-of-interest present in a gastrointestinal tract of an individual; and

(b) an outer housing comprising a confining mechanism for confining said sink mechanism inside said housing in a predetermined confinement, hence directing said net influx is into said confinement.

2. (original) The device of claim 1, wherein said net influx generated by said sink mechanism is substantially higher than a net influx generated by a concentration difference of said at least one constituent-of-interest devoid of said sink mechanism, said concentration difference being the difference between concentrations of said at least one constituent-of-interest in and out of said predetermined confinement.

3. (original) The device of claim 1, wherein said sink mechanism is selected from the group consisting of a sink material and a sink device.

4. (original) The device of claim 3, wherein said sink material is for absorbing said at least one constituent-of-interest.

5. (original) The device of claim 4, wherein said sink material is selected from the group consisting of a high affinity sink material, a low affinity sink material and a combination of a high affinity sink material and a low affinity sink material.

6. (original) The device of claim 5, wherein said high affinity sink material is selected from the group consisting of an antibody, whereby said constituent-of-interest is an antigen, a receptor whereby said constituent-of-interest is a ligand, a ligand whereby said constituent-of-interest is a receptor, an enzyme whereby said constituent-of-interest is an inhibitor, an inhibitor whereby said constituent-of-interest is an enzyme and a lectin whereby said constituent-of-interest is a saccharide.

7. (original) The device of claim 5, wherein said low affinity sink material is selected from the group consisting of a nutritional fiber, a clay and a resin.

8. (original) The device of claim 3, wherein at least a portion of said sink material is attached to a solid phase.

9. (original) The device of claim 3, wherein said sink material is water soluble.

10. (original) The device of claim 3, wherein said sink material is water non-soluble.

11. (original) The device of claim 3, wherein said sink material comprises beads.

12. (original) The device of claim 3, wherein said sink material comprises a polymer.

13. (original) The device of claim 3, wherein said sink material comprises an inert solid phase to which affinity sink molecules are attached.

14. (original) The device of claim 3, wherein said sink material is for converting said at least one constituent-of-interest.

15. (cancelled)

16. (cancelled)

17. (original) The device of claim 14, wherein said sink material is a catalyst.

18. (original) The device of claim 14, wherein said catalyst is water soluble.

19. (original) The device of claim 14, wherein said catalyst is attached to a solid phase.

20-27. (cancelled)

28. (original) The device of claim 14, wherein said sink material is a living organism.

29. (original) The device of claim 28, wherein said living organism is selected from the group consisting of a bacterium, a unicellular parasite, a multicellular parasite and a fungus.

30. (original) The device of claim 29, wherein said fungus is a yeast.

31. (original) The device of claim 28, further comprising a selective membrane for allowing a preferred influx of said at least one constituent-of-interest.

32. (original) The device of claim 3, wherein said sink device is for converting said at least one constituent-of-interest.

33-38. (cancelled)

39. (original) The device of claim 1, further comprising a mixing mechanism for actively mixing a content of said predetermined confinement and/or the surroundings of the device.

40. (original) The device of claim 39, wherein said mixing mechanism comprises a heating device.

41. (original) The device of claim 39, wherein said mixing mechanism comprises a mechanical mixer and a power source for operating said mixer.

42. (original) The device of claim 39, wherein said mixing mechanism comprises a sound wave generator.

43. (original) The device of claim 1, further comprising a flow generating mechanism for actively generating a flow of gastrointestinal fluids through said predetermined confinement.

44. (original) The device of claim 43, wherein said flow generating device is a pump.

45. (original) The device of claim 1, wherein said confining mechanism comprises a housing.

46. (original) The device of claim 45, wherein said housing is composed of a bioresistant material.

47. (original) The device of claim 3, wherein said confining mechanism comprises linkers linking among molecules of said sink material, thereby forming a molecular mesh structure.

48. (original) The device of claim 45, wherein said housing is designed and constructed so as to prevent damage to said sink mechanism by constituents of said gastrointestinal tract.

49. (original) The device of claim 45, wherein said housing is designed and constructed so as to prevent damage to said gastrointestinal tract by the sink mechanism.

50. (original) The device of claim 1, further comprising a substance for maintaining a predetermined pH level within said predetermined confinement.

51. (original) The device of claim 45, wherein said housing is configured for expanding and/or contracting.

52. (original) The device of claim 1, made detectable by at least one detection method for detecting the device in said gastrointestinal tract.

53. (original) The device of claim 52, wherein said at least one detection method is non-invasive.

54. (original) The device of claim 52, wherein said at least one detection method is imaging.

55. (original) The device of claim 52, wherein said at least one detection method is selected from the group consisting of x-ray imaging, magnetic resonance imaging, ultrasound imaging, gamma-gamma imaging and automatic tracking.

56. (original) The device of claim 1, further comprising a protective cover made of a biodegradable material, said protective cover being design and constructed to degrade only when arriving to a predetermined location of said gastrointestinal tract.

57. (original) The device of claim 1, wherein said at least one constituent-of-interest is selected from the group consisting of a toxin, creatinine, uric acid, a hepatic toxic metabolite, alcohol, an alcohol metabolite, an electrolyte, a therapeutic or a medicinal agent, a detergent, a renal metabolite, a poisonous substance, a nutritional substance, a biochemical compound and a heavy metal.

58-108. (canceled)

REMARKS

Applicant has carefully studied the outstanding Official Action mailed on June 25, 2007. This response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

Claims 1-5, 8, 10, 12, 39, 43-46, 48, 49, 51-57 stand rejected under 35 USC 102(e) as being anticipated by Stolz.

Applicant notes with gratitude that claims 6, 7, 9, 11, 13, 14, 17-19, 28-32, 40-42, 47 and 50 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In the above rejection, Examiner states that the "material forming the capsule is considered to be the sink material." Applicant respectfully traverses this statement. Quoting from the specification, paragraph "[0133] Referring now to the drawings, FIG. 1a is a schematic illustration of device 10, which, in its simplest form, comprises a sink mechanism 14, capable of generating net influx of constituent-of-interest 15, and a confining mechanism 11 for confining sink mechanism 14 in a predetermined confinement 12." The capsule is the confining mechanism 11 which is distinct from the sink mechanism 14.

Although the above rejections are traversed, for the purposes of expedited allowance claim 1 has been amended to better point out structural differences between the claimed invention and the cited art. Claim 1 has been amended to state that there is an outer housing that comprises the confining mechanism which houses therein the sink material - the sink material is not the confining mechanism.

It is respectfully believed that all claims of record are now allowable.

Applicant hereby permits email correspondence with Applicant's representative, especially for clarifying points to lead to allowance of the application.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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